2024 WI Land+Water Conference Breakout Sessions

Wednesday, March 6, 1:45-2:45pm

Communicating Socially Sensitive Science to the Public: Skill Building Workshop. Engaging the public is key to building the resilience momentum our communities need. In this workshop, you'll learn research-based techniques for communicating socially sensitive science, and how these techniques have been applied in Midwestern audiences on climate. The published techniques taught in this workshop will help you develop skills around confidently creating positive, action-oriented partnerships. We'll practice these techniques to help build your confidence and skill around public-facing communication in a fun, high-energy atmosphere. *Presenter: Emily Schoerning, American Resiliency.* 1 Professional Development CEU

Opportunities and challenges growing industrial hemp in Wisconsin. Industrial hemp is a new and versatile crop produced and adapted to Wisconsin's climate. Many opportunities and challenges exist related to growing and marketing industrial hemp. Learn how industrial hemp's physiology and development fit in a cropping and soil conservation system. This session will provide information about the agronomic needs of industrial hemp and its many uses for fiber, grain, oil, and essential oils. Industrial hemp's use as a potential cover and forage crop will also be discussed. Presenter: Jerry Clark, M.S., CCA, Regional Agriculture Educator for Chippewa, Dunn, Eau Claire Counties, UW-Extension Chippewa County. 1 Crop Management CEU

Farmland Preservation Basics: Farm Inspection Form Updates and Practical Insights. Join us for a session on the Farmland Preservation farm inspections. We'll cover recent changes to the Farm Inspection report checklist. This is a great opportunity to familiarize yourself with the updates and learn some practical tips and tricks from seasoned staff. This session will set the stage for future trainings later this year, focusing on refining your skills and building professional judgment for farm inspections. Presenters: Cody Calkins, DATCP, and county staff TBD. 1 Professional Development CEU

Advancing Indigenous Food Systems Coordination. Building upon past intertribal successes in coordinated conservation and partnership, Wisconsin Tribes recently formed a Great Lakes Intertribal Food Coalition to support farm-to-community efforts that include the Tribal Elder Food Box Program and direct technical/financial assistance to Indigenous growers, graziers, and harvesters. The heightened relationships with individual producers is allowing targeted assistance across a range of programs and areas of expertise that better support unique needs in a coordinated manner. Presenter: Daniel Cornelius Outreach Program Manager, Great Lakes Indigenous Law Center - UW Law School. 1 Professional Development CEU

Perspectives on Agriculture, Conservation, and Water Quality. The relationship between agriculture, conservation, and water quality has been a topic of much discussion in Wisconsin in recent years. In this moderated session, policy and government affairs experts from statewide agricultural groups will share their perspectives on the subject, and offer a look at what comes next. Presenters: Jordan Lamb, The Welch Group; Jason Mugnaini, Wisconsin Farm Bureau Federation; Michelle Ramirez-White, Wisconsin Farmers Union; Chad Zuleger, Dairy Business Association. Moderator: Matt Krueger, WI Land+Water. 1 Professional Development CEU

Wednesday, March 6, 3:15-4:15pm

The Faces of County Conservation in Wisconsin: A Time to be Brave. Meet and learn from experienced movers and shakers around the state. Tailored for both new and experienced employees, this session is a great chance to meet others from around the state and hear about lessons learned from fellow conservationists. Speakers will kick off the session by sharing brief stories from their conservation career that helped shape who they are today, and then there will be an informal social meet and greet that includes key conservation partners and figures from around Wisconsin. Attendees will get to meet and ask questions of the speakers, partners, agency representatives

Building Community Capacity Through the Sauk County Farm.

In 2022, Sauk County developed a property master plan for the Sauk County Farm to ensure the continued management of the site's agricultural and natural resources, preservation of historic features, and transformation of the space into an educational amenity for the community. It is envisioned for the County Farm to become a place for citizens to converge, learn, and experiment with regenerative and conservation-friendly farming best-practices. This session will provide a brief history of the Farm, examine the need for a property master plan, summarize the master planning process, and discuss strategies for building community support and partnerships. *Presenters:*

and fellow conservationists from all areas of the state. 1
Professional Development CEU

Melissa Schlupp and Cassandra Fowler, Sauk County Land Resources & Environment Dept. 1 Professional Development CEU

Understanding National and State Assessments for Local Climate Action. Learn from climate scientists and natural resources experts regarding the most recent state and federal climate reports. Our expert panel will highlight the most recent climate assessments, variations across the region, and sector-specific vulnerabilities. Presenters: Katie Hein, DNR, and contributing WICCI Team Leaders. 1 Sustainability CEU

Non-metallic mining reclamation: Techniques that have/have not worked for successful reclamation. Roberta Walls, Nonmetallic Mine Reclamation Coordinator with WDNR will discuss reclamation techniques for nonmetallic mines. A compare/contrast of techniques at various stages of mining and reclamation that have been used will be discussed. Attendees will be given the opportunity to share their experiences and ask questions about best practices. 1 Soil & Water Management CEU

The Coon Creek Watershed to Present Day: 90 Years of Locally Led Conservation. Most historians agree that 1933 is the birth date when the U.S. Department of the Interior authorized the nation's first large-scale demonstration project on the 93,000-acre Coon Creek Watershed in southwestern Wisconsin. During the early 20th century, the Midwest found itself grappling with an environmental and agricultural crisis stemming from decades of unsustainable farming practices. The Driftless region of Wisconsin, known for its picturesque slopes and valleys, faced the threats of soil erosion and flooding that endangered homes, farms, and towns.

In response, the federal government selected the Coon Creek Watershed, which spans parts of La Crosse, Monroe, and Vernon Counties, as the location for a comprehensive demonstration project in 1933. With support from the University of Wisconsin, the U.S. Soil Erosion Service (NRCS), the Civilian Conservation Corps, and other agencies, farmers in the watershed collaborated to tackle the challenge. The project's goal was to rescue and rehabilitate the region's soils, waterways, forest, and wildlife habitat. Many conservation practices utilized today were born out of this project. Learn about the conservation history of the Coon Creek Watershed and see highlights from the 90-year celebration this past September. *Presenters: Bob Micheel, Monroe County Conservationist and Mike Dreischmeier, P.E., NRCS.* **1 Professional Development CEU**

Thursday, March 7, 8:00-9:15am

Technical Roundtable #1: Digest This. A discussion on the pros, cons, and concerns with manure digestion will be followed by "This was a problem and here's how I dealt with it" – a story with waste storage construction. Presenters: Ketty Clow, Chippewa County LCFM, and Rebecca Larson, PhD, Professor and Extension Specialist, Nelson Institute for Environmental Studies, UW-Madison. 1 Nutrient Management CEU / Engineering PDH

Grazing Session #1: Why Managed Grazing? Managed Grazing can check all the boxes when it comes to the environment, economics, and social aspects for vibrant farming systems. Learn why it's so important to move this forward. Hear about Grassland 2.0 and why graze dairy cattle (the Dairy Hub model). Presenters: Dr. Randy Jackson: Professor UW Madison-Plant and Agroecosystem Sciences; Serge Koenig-Conservation Technician Sauk County Land Conservation Services; and Joe Tomandl III-Grazing Based Dairy farmer, Executive Director-Dairy Grazing Apprenticeship, 2002 WI Leopold Conservation Award. Moderated by Paul Daigle. 1 Sustainability CEU

Understanding Neonicotinoids insecticides: Usage, Impact on Organisms, Efficacy, and Presence in Wisconsin Waters.

Neonicotinoids (neonics) are a class of insecticides widely used on Wisconsin crops. Potential health effects of neonics on non-target organisms have raised concerns. This session will review studies examining neonics' effects on beneficial insects and the efficacy of neonicotinoid seed treatments. We'll summarize years of groundwater and surface water sampling in Wisconsin, spotlighting detection locations, concerning concentrations, and the factors influencing neonicotinoid presence throughout the state. *Presenters: Mike Miller, Stream*

Safeguarding Communities: Collaborative Partnerships for Environmental Health and Clean Drinking Water. Learn more about the Health & Conservation Committee's work to foster the collaboration between county public health and land & water conservation departments as they work over shared environmental health goals and ensure access to clean drinking water for communities. In this session, we will hear from three different counties that are working across departments to protect drinking water. Presenters: Chase Cummings, Dunn County LCD; Dale Grosskurth, Marathon County Public Health Department; Kirstie Heidenreich, Marathon County LWCD; Jen

Ecologist, WDNR and Carla Romano, Groundwater Specialist, DATCP. 1 Integrated Pest Management CEU

McNelly, Portage County Planning & Zoning Department; and Lindsay Benaszeski, Portage County Public Health Department.

1 Professional Development CEU

Helping pollinators one county at a time. There are many ways pollinator habitat can fit into a landscape, there is no one-size fits all approach. Some counties work with clients that have acres and acres of farmland, others work in an urban landscape or primarily along lakes and rivers. Join county staff from three very different regions of the state to find out how each county plays a critical part in protecting and creating pollinator habitat. We'll go through the decision-making process on purchasing a no-till drill, what to put in it, and how to use that no-till drill to plant pollinator habitat. Presenters will also discuss planting plugs instead of sowing seed, integrating pollinator habitat into smaller landscapes, and educational outreach to drive home the point. Presenters: Tim Dahl, Door Co. SWCD; Michele Sadauskas, Oneida Co. LWCD; and Tim Wucherer, Eau Claire Co. LCD. 1 Sustainability CEU

Thursday, March 7, 9:45-11:00am

Hydrologic Restoration: An Overview. Hydrologic restoration means applying combinations of practices designed to the extent possible to return wetland, stream, and floodplain hydrology to a natural and self-regulating condition in order to achieve such goals as to slow the flow of runoff, reduce flood peaks, restore surface and groundwater interactions, improve water quality, or to increase soil retention, groundwater infiltration, base flow, upper watershed storage, and flood resiliency.

Join DATCP & Wisconsin Wetlands Association staff as they present the fundamental concepts of hydrologic restoration and discuss the broad applications and strategies that can help build capacity for hydrologic restoration in the State of Wisconsin. Discussion topics will include recent and pending policy changes, management objectives, permitting, and how hydrologic restoration can address agricultural resource concerns and other state priorities. 1 Soil & Water Management CEU / Engineering PDH

Grazing Session #2: How to change the landscape and see more farmers choose grazing. This session begins with place-making to re-center the dominant narrative. Next grazing education and outreach that makes an impact will be discussed, including training technical service providers and grazing planners, understanding how farmers pursue information, reaching stakeholder groups who normally don't participate, and identifying groups who have the greatest influence on farmers. Hear about farmer training and education by GrassWorks and Dairy Grazing Apprentice. The session concludes by exploring the needs of Land Conservation Departments. Presenters: Dr. Randy Jackson: Professor UW Madison-Plant and Agroecosystem Sciences; John Strauser, PhD, Scientist UW Madison Department of Plant and Agroecosystem Sciences; Jason Cavadini-UW Grazing Outreach Specialist; Patty Laskowski Morren-GrassWorks Inc Executive Director and Grazing Based Dairy Farmer; and Joe Tomandl III-Grazing Based Dairy farmer, Executive Director-Dairy Grazing Apprenticeship, 2002 WI Leopold Conservation Award. Moderated by Paul Daigle. 1 Sustainability CEU

Reaching and Supporting Small-Scale Producers. Presenters from the Natural Resources Conservation Service (NRCS), Renewing the Countryside, and Michael Fields Agricultural Institute will discuss program opportunities and best practices for reaching small-scale producers. Renewing the Countryside will present on Go Farm Connect, a farmer-led initiative to build relationships between non-traditional farmers and the agricultural support agencies and experts that can help farms succeed. NRCS will describe opportunities for conservation on small-scale agricultural operations including new NRCS practices. Michael Fields Agricultural Institute will present on the Wisconsin Women in Conservation (WiWiC) Program (funded by the NRCS) that creates 'women only' spaces for supporting landowners and farmers, to pursue conservation and be better stewards of the land. 1 Professional **Development CEU**

Biosolids and Nutrient Management. In this session, you will learn about biosolids, how they are regulated, how they can be incorporated into a nutrient management plan, and things to look out for when working with landowners who accept biosolids. Kim Meyer, Agronomist for Dane County, will share biosolids regulatory and management information from her previous experience managing the biosolids program in Madison. Andrea Topper, Outreach Conservation Specialist with DATCP, will share how biosolids data from a wastewater treatment plant can be entered into SnapPlus, along with things to look for when working with this nutrient source as part of nutrient management plan. Dr. Dick Wolkowski, UW Madison Extension Soil Scientist, Emeritus, will bring his experience working within UW Nutrient Management Guidelines, effects of soil type, and considerations and questions farmers have about incorporating biosolids into their operation. 1 Nutrient

Management CEU

Organizing Community and Youth Education Events. Big ideas may happen overnight; successful programs take time. After years of organizing conservation education events, Washburn and Washington Counties will share their knowledge of how to bring local communities, partners, and youth together. Learn how Washburn County partners with Polk and Burnett Counties to engage high school students in a Land Judging Contest to learn about soil texture, structure, drainage, production capabilities, and suitable land uses of the site. The contest is rotated annually between the three counties and relies on local farmer support, NRCS staff, and volunteers. 2024 will mark the 50th year of the event! Washington County will share their 25 years of experience that has created successful avenues for their existing youth education programs. Details about how to organize National Ag Day Farm Tours & Farmer in the Classroom Programs will be shared. Gain insight on how to collaborate with Producer-Led Watershed Group efforts and local youth. Community engagement is a challenge today; learn how your county can build programs that bring volunteers, farmers, youth and the community together. **1 Professional Development CEU**

Thursday, March 7, 1:15-2:30pm

Technical Roundtable #2: Hydrologic Restoration: Applications for Conservation. Join the Department of Agriculture, Trade
and Consumer Protection and Wisconsin Wetlands Association
staff as they provide a field level view of how hydrologic
restoration can inform the planning, design, and
implementation of conservation practice standards. We will
take a watershed view and identify landscape features and
hydrologic alterations within a watershed, discuss how stacking
conservation practices from the headwaters down to the mouth
can help reverse the alterations to the hydrologic cycle, and
how we might mitigate some of the impacts that have occurred
on the landscape due to these alterations. **1 Soil & Water Management CEU / Engineering PDH**

Public Speaking: Owning the "Stage" as a Conservationist. *Identify your strengths and areas for improvement as a speaker.* Do you find yourself advocating for conservation issues to a variety of audiences? Are you interested in learning tips, tricks, and strategies to enhance your public speaking and communication skills? Attend this session to hear from those who've been there before. County conservation staff will share insights into their own experiences as public speakers and how they lived to tell the tale. Session topics include public speaking skills and strategies for 1-on-1 conversations, peer groups of professionals, and audiences of the public. Attendees will be tasked with reflecting on their own experiences, assessing their current skills, and identifying strategies and opportunities for improvement. Presenters: Heather Wood, Dunn County; Chris Arrowood, Langlade County; and Tonya Gratz, Green County. 1 **Professional Development CEU**

Wisconsin's Nine Key Element Watershed Plans – Current Status and County Implementation. This session will first have Andrew Craig, DNR, provide a short summary on the current number, location, type and expiration dates for 9 Key Element watershed-based plans in Wisconsin. Then, the session will focus the majority of time with a panel of LWCD staff from Outagamie, Polk, Waupaca, and Bayfield Counties, who will share their experiences and lessons learned from working to implement plan milestones. County staff will also discuss how many plans they can realistically support with current staff levels, interest in renewing existing plans before/as they expire, and funding challenges. 1 Professional Development CEU

Engaging Farmers and Rural Residential Landowners in Groundwater Quality. County staff and local officials are increasingly asking the question of whether groundwater quality is getting better or worse. In the first half of the session Kevin Masarik will provide an overview of data collected in Chippewa, Dodge, Green, and Sauk Counties for developing predictive models for nitrate in private wells and investigation of trends in nitrate-nitrogen levels. These projects utilize rural landowners as active participants in the investigation of water quality and provide a template for other communities to collect similar data. In the second half of the session, Guolong Liang and Anna James will highlight results of a social indicator survey performed to inform water quality improvement efforts related to the 14-Mile watershed 9 Key Element Plan. Their presentation will cover the process for incorporating social science into conservation management, trust building with community members, and how to use social indicators as a way to inform planning, implementation, and evaluation of conservation efforts. 1 Soil & Water Management CEU

The River That Flows Uphill: Geologic Evolution of the Lower Wisconsin River Valley, Stream Piracy, and Reorganization of North American Mid-Continent River Systems. The lower Wisconsin River flows west across southern Wisconsin and is part of the upper Mississippi River drainage system. However, landscape features within the valley indicate that it was originally formed by a river flowing east. Analysis of subsurface geologic data suggests that this valley was once part of a river system that drained large

portions of Minnesota and Wisconsin, flowing eastward across what is now the Great Lakes very close to Green Bay, WI. Glacial ice advancing south from Canada blocked this river, causing large lakes to form. As the lakes overspilled, they formed new drainage paths. This 'stream piracy' rerouted rivers across central North America to become the upper portion of today's Mississippi River system. Presenter: Eric C. Carson, Quaternary Geologist / Professor, Wisconsin Geological & Natural History Survey, University of Wisconsin-Madison. 1 Professional Development CEU

Thursday, March 7, 3:00-4:15pm

Technical Roundtable #3: ArcPRO/Civil 3D Integration. Want to design your conservation projects in less time? Join us as we demo a project integrating Esri ArcGIS software and AutoCAD Civil 3D. We will convert an existing ArcMAP project to an ArcPRO project, take the data from ArcPRO and integrate it to AutoCAD Civil 3D by setting up a project, bringing in contours and survey points, grading the site, and cutting a profile. We'll also show you some ArcPRO and CAD tips and tricks we've picked up along the way. Those with a general knowledge of ArcGIS Software and Civil 3D will get the most of out this session. Presenters: John Ferguson, Chippewa County 911 GIS Coordinator; John Sewell, Grant County Soil & Water Conservation Technician; Kelli Neitzel, DATCP Environmental Specialist; and Ketty Clow, Chippewa County Environmental Engineer. 1 Professional Development CEU / Engineering PDH

Accounting for Carbon on the Landscape. Dane County's Climate Action Plan puts the County on track to be carbon neutral by 2030. While the plan has multiple strategies to cut emissions, conservation practices have an opportunity to sequester carbon. But how much carbon can be sequestered? How do we measure it? Dane County LWRD staff will share their approach for quantifying carbon sequestration through direct measurement and modeling to track progress towards being carbon neutral. WI Land+Water staff will highlight the USDA greenhouse gas accounting tool suite, COMET to show how to estimate sequestration potential at the field or county level. *Presenters: Michelle Probst, Dane County LWRD, and Christina Anderson, WI Land+Water.* 1 Crop Management CEU

Reel Conservation: Making an Impact with Videos.

Join the WI Land+Water Outreach Committee for an immersive conference session that dives into the dynamic world of in-field filmmaking for conservation. Learn about essential techniques for crafting compelling narratives, selecting the right equipment, and harnessing algorithms to amplify your impact. Presenters: Dan Smith, UW Extension; Matthew Oehmichen, Short Lane Ag Supply; Emily Schoerning, American Resiliency. 1 Professional Development CEU

Selling Conservation to Landowners. Most conservation professionals have expertise in explaining the environmental and agronomic benefits of conservation practices to landowners. A better understanding of farm finances and the potential economic benefits resulting from adoption of soil health practices can take program success to a new level. In this workshop we'll explain farm enterprise budgets and cash flow. We'll discuss the economics of some of the most commonly adopted conservation practices. Finally, we'll offer suggestions to help conservation professionals become more comfortable discussing numbers with landowners. *Presenters: Paul Dietmann, Senior Focused Lending Specialist. Compeer Financial and Serge Koenig, Sauk County LRED.* 1 Professional Development CEU

Ashland County's Act 157 Natural Flood Management Demonstration Project.

In response to extreme flooding in 2016 and 2018, Ashland County has been collaborating with the Wisconsin Wetlands Association and other partners to assess and demonstrate where Natural Flood Management (NFM) solutions like headwater wetland restoration and floodplain reconnection can improve the resilience of transportation infrastructure in the Marengo River Watershed. NFM emphasizes restoring wetland, stream, and floodplain hydrology to reestablish the landscape's natural capacity to capture, store, infiltrate, and slowly release runoff.

Ashland County's Natural Flood Management demonstration project was leveraged with the WI Legislature's 2019 Act 157, an unprecedented \$150,000 allocation authorized to design and implement nature-based solutions to flood hazards and local water infrastructure challenges in Ashland County. The project team created an NFM "Catchment Implementation Plan" that utilized the best available data to prioritize, design, construct, and monitor projects that slow the flow of runoff and improve water quality and fish and wildlife habitat.

Act 157, along with additional grant funding, enabled Ashland County to implement a combination of on-farm, in-stream, and wetland conservation practices to restore hydrologic connections, conditions, and functions on a catchment scale in the Marengo River Watershed. This presentation covers the background of Act 157, project site selection and landowner recruitment,

permitting and design challenges, implementation, and recommendations for using hydrologic restoration (NFM) to reduce flood risks and achieve other land and water management goals. It will also highlight the next steps for implementing the NFM Catchment Implementation Plan and expanding NFM work to other catchments of vulnerable road-stream crossings. *Presenters: Kyle Magyera (WI Wetland Association), Seth Hackbarth and MaryJo Gingras (Ashland Co. LWCD).* **1 Soil & Water Management CEU / Engineering PDH**

Friday, March 8, 8:00-9:00am

SITCOM's Interagency Mentor Program for Conservation Professionals: Program Kick-off! Learn more about the mentorship program, meet pilot participants, and learn how you can join. Interested in having a mentor, being a mentor, or being connected to a cohort of professional peers? The State Interagency Training Committee (SITCOM) has recently completed the pilot for a conservation mentorship program.

This session will share lessons learned from participants, details about the program moving forward, and how the program came to be. Attendees will also get to participate in a networking meet-and-greet to discover potential match opportunities within their region of the state. 1 Professional Development CEU

up mentorship programs and identifying support needs for farmer-led groups. Natural Resources Educators (NREs) with the Division of Extension provide outreach support for both Demonstration Farm Networks and Producer-Led Watershed groups (PLWGs) across the state. During this session, NREs will share evaluation results from two recently completed projects. The Fox Demo Farms completed a two-year pilot mentorship program. NREs provided support in designing the evaluation to understand the program's impact and recommendations for scaling it up. PLWGs have expanded throughout the state. To understand the support groups receive from partners, NREs have conducted a statewide evaluation. They will share findings from a survey and series of interviews designed to inform decisions on the types of support that are most beneficial and needed by farmer-led groups. Presenters: Whitney Prestby and Anna James, UW-Madison Division of Extension. 1 Professional **Development CEU**

Evaluating Farmer Networks: Recommendations and scaling

Renewable Energy Projects: the good, bad, and ugly. Kurt Calkins, Columbia County LWCD, will provide an overview of the challenges and success that Columbia County has worked through since 2019. They have had intense development pressure from Solar Energy Generating Facilities. He will showcase the road map they have developed to address citizen concerns considering the regulatory restrictions found in Wis. Stat. § 66.0401(1m). Next, Erik Heagle, Grant County CSZD, will discuss wind energy projects in Grant County and the pressure received from the public and outside influences. He will talk about PSC 128, Grant County's Wind Siting Ordinance, appeals, and share some stories and opinions from their most recent project. 1 Professional Development CEU

Collaboration Around Water: The Unifying Resource. Water is a resource that impacts everything. The Milwaukee Metropolitan Sewerage District (MMSD) utilizes water as a rallying point to develop partnerships and collaborations. These watershed partnerships have helped the Milwaukee region reduce the volume of sewer overflows, naturalize waterways, expand green infrastructure, work with agriculture, and restore habitat. The results are starting to materialize through improved neighborhoods, cleaner water, expanded habitat, and less flooding. This 25-year effort will be described during this presentation. *Presenter: Kevin Shafer, MMSD Executive Director.* **1 Soil & Water Management CEU**

Integrating Volunteer Stream Monitoring into Your Conservation Efforts. For over 25 years, the Water Action Volunteers (WAV) program has provided free training, equipment, and support for volunteer stream monitors and local partners who are interested in monitoring the water quality of wadeable streams and rivers. Learn how we support partners to grow volunteer stream monitoring groups. We will cover the types of monitoring that volunteers do, share examples of counties that have active WAV stream monitoring groups, share where to find the data and how to use it, and answer questions about the program. *Presenters: Katy Bradford, Water Action Volunteers Program Manager, UW-Madison Extension and Emily Heald, Rivers Educator, UW-Madison Extension.* **1 Professional Development CEU**

Friday, March 8, 9:15-10:15am

Investigating alignment of agricultural land management policies and standards with water quality outcomes – lessons from data, models, and interviews. Policies – and the programs and practices that result from them – are ideally designed to

Beavers, for Biodiversity, Climate Resilience, and Restoring the Hydrology of Lake Superior. Beaver ponds and canals created by dams are the natal structure of all rivers in North America. Rivers that are "Fully Beavered" have numerous ponds in the

align well with certain outcomes. In the worlds of agriculture, land, and water policy, multiple (often competing) objectives can lead to cases where alignment of policy with desired water quality outcomes (standards) is difficult to achieve. For example, spatial targeting of certain policies do not always align with nutrient hotspots, and agricultural performance standards do not always translate to achieving water quality standards downstream. In this session, we will present several examples – using recent data and models along with interviews from local managers and stakeholders – of this policy challenge from the Northeast Lakeshore region and ask for feedback and discussion on how best to improve alignment. Presenter: Eric Booth, PhD. Associate Scientist - Hydroecology. Department of Agronomy, Department of Civil & Environmental Engineering, Nelson Institute for Environmental Studies, UW- Madison. 1

upper branches and are rich in supporting biodiversity, while also providing critical water quality benefits. Beaver dams, with the resulting ponds and canals filter water, recharge ground water, reduce peak flows during flooding events, cool water in summer and warm it in winter. With Climate Change we are seeing instability in weather patterns. We are also in global biodiversity crisis. At this presentation you will learn how restoring beaver populations and the structures they build is the most cost effective thing we can do for the health of the Lake Superior Watershed while supporting the biodiversity within it. *Presenter: Bob Boucher, President, Superior Bio Conservancy and Founder of Milwaukee RiverKeeper.* 1

Professional Development CEU

Professional Development CEU

Using Normalized Difference Tillage Index (NDTI) to assess Cropland Management on a Large Scale. Nick Peltier, Brown County LWCD, will discuss how Brown County LWCD has been using publicly available satellite data and GIS to assess cropland management. With a little field verification, NDTI can give you information about tillage intensity and residue cover over an area as large as a county. Using this technique county staff have been able to determine how cropland management trends change spatially and temporally. NDTI can be useful information when making determinations on what lands need to be prioritized for BMPs and can also serve as a measuring stick for your conservation efforts. 1 Crop Management CEU

Opportunities to Implement Agroforestry in Wisconsin.

Agroforestry can bring many benefits to the land and those who manage it. In this session, Matt Wilson, Savanna Institute, and Allan Braun, NRCS, will share examples of farms that are implementing agroforestry practices such as alley cropping, silvopasture, and windbreaks. We'll explore opportunities for technical assistance and funding, as well as some of the complexities and challenges of adding trees to an agricultural operation. 1 Crop Management CEU

County policies to protect groundwater quality. Want to learn about what policies central Wisconsin counties have adopted to protect their groundwater? We'll review survey results about how counties are using comprehensive plans, zoning districts and lot sizes, land division ordinances and well abandonment to protect groundwater quality. Presenter: Lynn Markham, Center for Land Use Education, a collaboration between Wisconsin Extension and UW-Stevens Point. 1 Soil & Water Management CEU